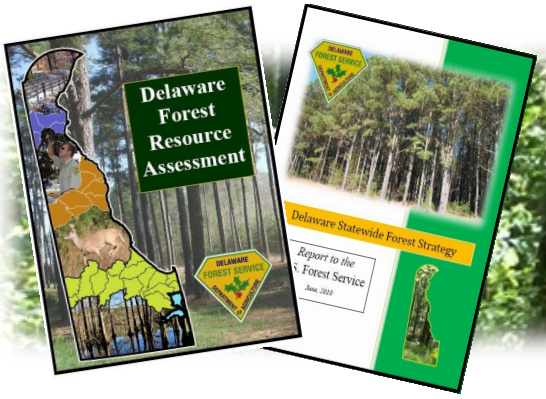
Evergreen

Delaware Community Forestry Council News

Summer, 2010



The *Delaware Forest Resource Assessment* and *Statewide Forest Strategy* represent the contributions of numerous stakeholders. Read the full reports at dda.delaware.gov/forestry

New Reports Map Future of Delaware's Forests

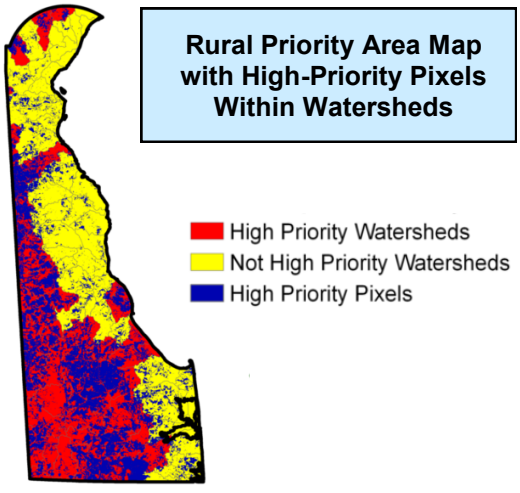
A comprehensive look at the past, present, and future of Delaware's forests – both urban and rural – are outlined in two new reports for the U.S. Forest Service. Required as part of the 2008 Farm Bill, the reports represent the culmination of years of hard work and the combined contributions of many concerned stakeholders.

The *Delaware Forest Resource Assessment* is an 84-page document that offers a brief historical overview of Delaware's forests followed by an in-depth assessment of current forest conditions and trends. While noting that Delaware has more forest acreage today than a century ago, the report also raises the concern that forestland statewide is currently declining. It also reports that the First State's forests are facing an increasing threat of fragmentation from development, with a corresponding negative impact on both air and water quality and wildlife habitat.

A major goal of the assessment report was to identify "priority landscapes" within the state where future federal funding could best achieve targeted strategies for Delaware's forests. The state's Forest Stewardship Committee, along with its public agency and private partners, weighed numerous factors to determine how to prioritize forestry programs to achieve a range of important objectives. To aid the process, dozens of statewide resource map layers were developed by the Delaware Forest Service using Geographic Information System (GIS) technology. These maps were the basis on which the committee formulated both the rural and urban priority forest areas.

For the rural forests, one single statewide area was defined [see map below], which primarily centered on the areas within Delaware watersheds that represent greater potential for forest stewardship, preservation, improved water quality and wildlife habitat.

(*see* "Mapping Future of Forests *on page 4*)



Rural Priority Area Map with High-Priority Pixels Within Watersheds

Highlights from Delaware's 2010 Arbor Day celebration are on page 2.

WHAT TREE IS IT?

CLUES:

- This tree is found primarily on moist soils in cold and temperate regions of the Northern Hemisphere. Its strong roots help hold soil in place along waterways.
- This tree was used to make charcoal for gunpowder, which helped E.I. du Pont to found Eleutherian Mills on the banks of the Brandywine River in 1802. This mill was the forerunner to today's global DuPont corporation.
- This tree's bark also contains salicylic acid, the active ingredient in aspirin. Because of its use for centuries in various medicines and remedies, it has been regarded as a "sacred" tree by some cultures.

Answer on page 3

In this issue:

Ed Kee, Delaware Secretary of Agriculture, joined Kathryn P. Maloney, Director for the U.S. Forest Service's Northeastern Area, as she presented a $4 million grant for forestland preservation to Delaware Governor Jack Markell and Acting State Forester, Michael A. Valenti. The money will fund the "Green Horizons Project," a multi-phase effort to protect forestland in Sussex County. Since 2004, Delaware has received almost $15 million from the U.S.F.S. Forest Legacy Program.

Above: *Fifth-grader Spring Vasey of Lincoln is honored by Governor Jack Markell as Delaware's representative to the Arbor Day Foundation's National Poster Contest.*
Below: *Acting State Forester Michael Valenti (left) joins Governor Jack Markell to honor Alyse Lanette of Glasgow Christian Academy in Bear for her winning poster in the Grades K-4 category.*

Arbor Day 2010 Highlights

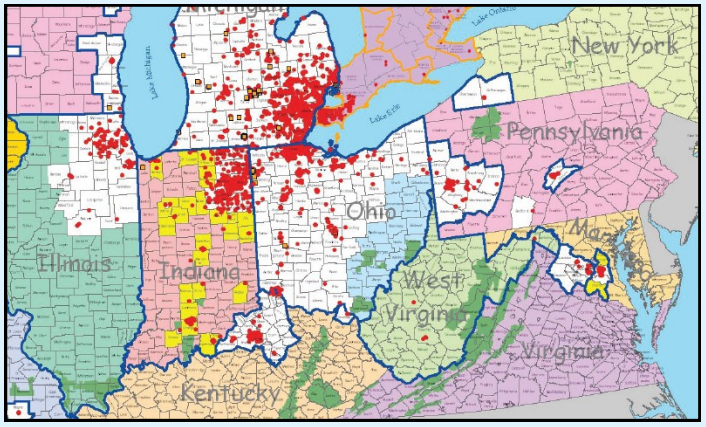
Arbor Day Poster Contest Winners at Delaware Agricultural Museum
Celebrating the planting of an American holly, Delaware's state tree, are: (from left) State Rep. Robert Walls (D-33); Ricardo Diaz of Seaford; Mercy Winston and Daniel Winston, both of Milford; Delaware Secretary of Agriculture Ed Kee; Huda Kose and Yusuf Kose, both of Newark; Logan Clough of Clayton, Acting State Forester Michael Valenti, Lauren Phillips of Newark; Gina Valdez of Milford; Alyse Lanette of Bear; and Lake Vasey and Spring Vasey, both of Lincoln.

Wasp is Early Warning System for Emerald Ash Borer

Cerceris fumipennis

Agrilus planipennus

This summer, forest health personnel in Delaware will be using a solitary predatory wasp as a new strategy to detect Emerald ash borer (EAB), the invasive pest from Asia that has killed millions of ash trees in the United States since its discovery in Michigan in 2002. To date, virtually all of the efforts to eradicate this insect have been unsuccessful. Delaware is still considered a likely potential site for EAB's appearance with the discovery of a cluster of cases in nearby Maryland in 2003. In 2006, more cases were found outside the established containment zone there.



The red dots on this U.S. Forest Service map represent the known areas of EAB's presence. Forest health specialists are now using a native wasp to detect low-level infestations as early as possible.

The inability to stop EAB has led to a renewed focus on early-detection efforts by state and federal officials. In recent years, forestry staff in the northeastern states began monitoring a solitary ground-nesting wasp (*Cerceris fumipennis*) that preys solely on buprestid beetles—the family to which EAB belongs. In July and August, a female wasp typically stocks her nest – usually found on flat sandy ground such as a baseball field – with a borer insect from the nearby woods. If EAB is present, it can be spotted when the wasp brings her prey back to the nest.

"There are no great survey techniques for EAB. In other states, 'new' detections are often found to be 4-7 years old. Thus, we may already have EAB here in Delaware."

- Glenn "Dode" Gladders
Forest Health Specialist, Delaware Forest Service

While species of ash (*Fraxinus* spp.) are not a major component of the overall forestland in the First State, urban areas in northern Delaware have a higher concentration of ash trees, and EAB could have a devastating effect on certain neighborhoods. This is why an early warning for EAB would help mobilize available resources to help mitigate possible damage. In addition to cutting down and removing trees, some homeowners could opt for chemical treatments to help slow down EAB.

In cooperation with the Department of Agriculture's Plant Industries section, staff from the Delaware Forest Service will use three methods to survey for EAB within the state: purple sticky traps near ash trees throughout the state, visual surveys at highway rest stops in New Castle County, and the new "biosurveillance" method using the wasp. If EAB is already here, officials hope that these multiple methods will give them a headstart on managing the insect and its devastating consequences.

Answer to **"What tree is it?"**

Willow leaves

Many varieties of the willow tree (*Salix* species) exist, often found near streams where their strong roots hold the banks in place. In residential areas, willow roots can spread widely in a search for moisture and can potentially damage water pipes and other drainage systems. Willows are cross-fertile and grow readily from cuttings, resulting in numerous hybrids. Black willow trees (*Salix nigra*) are native to Delaware.

Brennan Estates is a "Tree-Friendly Community"

(*From left*) Zenobia Thompson, board member of Brennan Estates Association in Bear, New Castle County, is joined by urban forester Kyle Hoyd alongside a sign that recognizes the area as a "Tree-Friendly Community." For more details on the program, call **(302) 943-7869.**

Pear trees are not best choice for planting

Many popular varieties of pear trees (such as Bradford or Cleveland select) offer landowners oval-shaped canopies of attractive springtime flowers. But this invasive tree species also has many less-desirable qualities.

Property owners who choose to plant one of the popular varieties of pear trees might be struck by its almost perfect oval-shaped canopy (some have compared it to a lollipop) and hope to add its picturesque appearance to their landscape. But many owners might not be aware that the tree has a number of potential problems that could cause them to rethink their decision to plant it.

First and foremost, the pear tree's beautiful shape is not the result of natural selection, but instead is the product of selective cultivation to produce its desirable traits, much like an orange skin is bred for a long shipment to market. The bottom line is that the tree's structure is usually not sufficient to support the mass of upward-spreading branches that produce the postcard look that makes the tree so popular. This makes it much more likely that a severe storm or bout of high winds will splinter the fragile structure into pieces (see photo above).

Another dark side to the tree is its recognized status as an invasive species. Its ability to propagate across the landscape and displace native trees has earned it a bad reputation among knowledgeable arborists. Add to this the fact that the tree is relatively short-lived (around 25 years), and you now have several good reasons to choose another tree for your property.

Mapping Future of Forests
(*continued from page 1*)

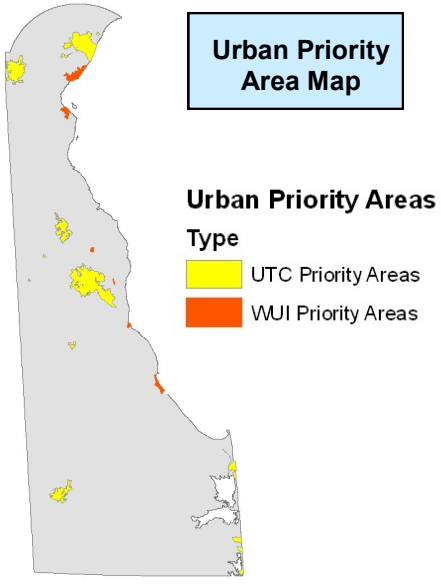
For the urban forest resources, a separate formula was developed which took into account the level of existing tree canopy within a community, its percentage of impervious surface, the percentage of fire risk present, and most importantly, its overall population density. A weighted formula was used to score Delaware's 57 communities. Of these, 23 were selected as high-priority areas: 17 were selected for their urban tree canopy (UTC) scores; another six for the assessed level of fire risk in wildland-urban interface (WUI) zones. The final urban map (right) depicts these areas in the state.

Phragmites poses a wildfire risk to the homes in Delaware coastal communities.

The Delaware Statewide Forest Strategy presents 19 separate strategies and 78 goals to address four key issues:

1. Forest Health and Functionality
2. Forest Markets
3. Sustainable Forest Management
4. Public Awareness and Appreciation of Forests

The report contains recommended strategies that include ambitious goals for conserving forestland, promoting afforestation, restoring wildlife habitat, improving water quality, promoting public awareness through educational initiatives, and increasing urban tree canopy throughout the state. A matrix of specific objectives establishes a five-year timeline to work toward bringing the goals closer to reality.



To keep track of progress on an ongoing basis, the DFS will use a database that is spatially linked to a GIS system. This will allow the DFS to provide results both spatially (maps) and descriptively (text). The maps will display accomplishments both within and outside priority forested landscapes, and annual reports will be issued to the stakeholders.